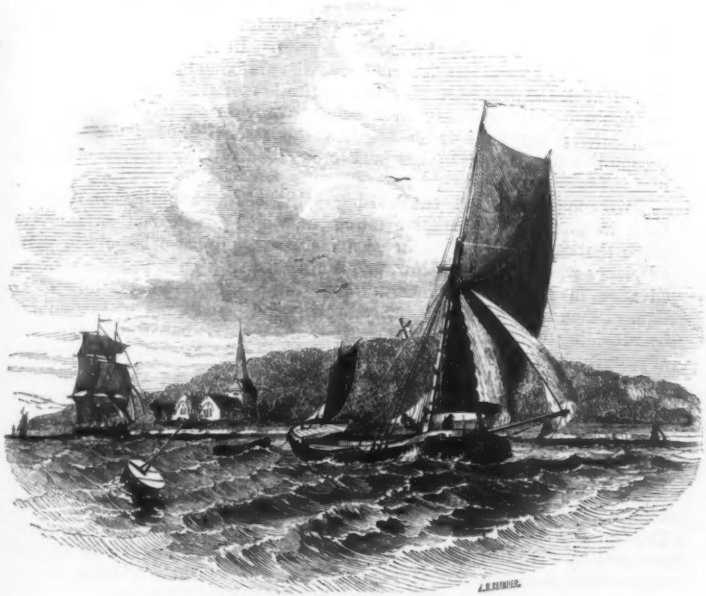
THE

HOME FRIEND;

A WEEKLY MISCELLANY OF AMUSEMENT AND INSTRUCTION.

PUBLISHED EVERY WEDNESDAY,
BY THE SOCIETY FOR PROMOTING CHRISTIAN KNOWLEDGE,
No. 16.] AND SOLD BY ALL BOOKSELLERS. [PRICE 1*d.*

ENGLAND'S RESOURCES IN TIME OF DEARTH.



THAMES CORN BARGE.

IT is a merciful provision of the Almighty, that, in time of dearth, one country is frequently enabled to supply the deficiencies of another, and that one year often supplies a redundance to help out the scarcity that may follow, or has preceded it. When the famine was "sore" in the land of Canaan and in the adjoining countries, Jacob said to his sons, "Behold, I have heard that there is corn in Egypt: get you down thither, and buy for

us from thence; that we may live and not die." In this case the famine had been foretold, and the resources of Egypt had been wisely husbanded by Joseph during the years of plenty which preceded the time of dearth. And even now, seasons of comparative scarcity, though not foretold, are in some measure anticipated and provided for, either by government, as in foreign countries, or, as at home, by a class of persons who, in seeking to promote their own interests, are really serving the interests of the nation at large.

"In Sweden, Prussia, Spain, Denmark, &c., magazines or storehouses of grain are erected in different places, in order to guard against bad seasons. In Spain alone, there are upwards of five thousand of these depositories, called *positas*. Every occupier of land is obliged to bring a certain quantity of corn, proportionate to the extent of his farm; the following year he takes back the corn he has thus deposited, and replenishes the empty garner with a larger quantity; and thus he continues annually to increase the stock by these contributions called '*cresus*,' till a certain measure of grain is deposited; then every one receives back the whole corn which he has furnished, and replaces it by an equal quantity of new corn. Whenever a scarcity happens, these repositories are opened, and the corn is dealt out to the people at a moderate price. In some places seed-corn is distributed to necessitous husbandmen, who are bound to restore as much in lieu of it the next harvest. The institution of such a system as this is no doubt highly necessary in a country only in an imperfect state of civilization; but that which requires the authority of government to accomplish abroad, is in England brought about by less questionable means."*

The commercial and enterprising spirit of our countrymen induces them to enter into speculative purchases, which in the end answer very much the same purpose. Our corn merchants purchase largely in years of plenty when prices are low, and store up wheat in expectation of an advance in the price. Thus, without intending to promote any other interest than their own, they really become the benefactors of the public, by providing a relief stock, which is of the greatest importance in a time of scarcity, and also by laying up what might otherwise be wastefully consumed while plenty lasts. Instead, therefore, of joining in the common cry against such persons, we have reason to be thankful that there are men of sufficient capital and experience to make these purchases, and that they are, generally speaking, disposed to sell immediately they can realize a fair profit. And if there are some who hold their corn in the hope of realizing enormous gains, and wait until the market begins to decline before they sell, it is often to their own shame and loss that they do it. The scarcity they create induces importation, and is thus more than compensated by the good eventually done. The immense amount of capital required to store corn largely, and the waste to which it is liable in the granary, also greatly check the desire to withhold corn too long.

Whatever may be the precautions employed by merchants and others in laying up for the future, there will be times and seasons when, as at present, we must look to other nations for a large amount of help as it regards our supply of corn. A total failure of crops scarcely ever happens throughout even one kingdom, for the weather which is unfavourable to one description of soil is generally advantageous to another; much less does it happen at the same time throughout the whole earth, in the various parts of which

* Dimsdale.

seasons and climates so greatly differ. Thus in 1846, when Europe suffered in many parts a great deficiency in her harvests, it was so arranged by the bounty of the Creator that America should receive an overflowing supply. How important then the continuance of peaceful commerce and rapid communication between all nations, that the deficiencies of one country may be supplied by the abundance of another!

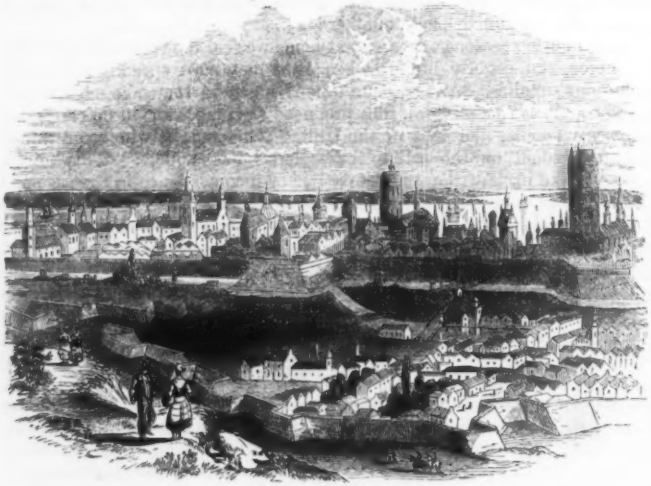
Hence during seasons of scarcity at home we feel the value of our foreign commerce, and eagerly inquire whence we may most speedily and safely obtain our supplies. At the same time it must be remembered, that our grand supply is as a general rule produced at home; for in no case can a numerous people, like that of the United Kingdom, be wholly or principally dependent on the soil of other lands for support. This might, perhaps, take place without much danger or inconvenience in the case of a small state or colony, but not with such a dense population as ours. For it is an ascertained fact, that "to supply these islands with the single article of wheat would call for the employment of twice the amount of shipping which now annually enters our ports, if indeed it would be possible to procure the grain from other countries in sufficient quantity; and to bring to our shores every article of agricultural produce in the abundance we now enjoy, would probably give constant occupation to the mercantile navy of the whole world."

But while our grand dependence will always be on our own resources, and on the advancing skill of our agricultural men, who, by improved systems of tillage and drainage, have of late years wonderfully increased the productiveness of the soil, yet there are times when a concurrence of circumstances will drive us to seek very extensive aid from other countries. The deficient harvest of 1846, and the pressure occasioned by the failure of the potato crop, produced in our own country and among many of the continental nations severe calamities, and great anxiety respecting the future. Through the mercy of God we have the prospect of a favourable harvest generally; but in the interval, we are naturally led to review the chief sources we have been accustomed to look to for our foreign supplies of corn, and to see how many of these remain available to us at the present time. To begin then with Europe, as the quarter from whence we have obtained, until lately, nearly the whole of our foreign supplies of corn.

At the head of all the corn-shipping ports, not only of Europe, but of the world, is Dantzic, situated on the left bank of the Vistula, about three miles from the sea (the Baltic). This is the grand emporium for the countries bordering the Vistula, both in its passage through Poland, and through part of Prussia. The soil in the neighbourhood of this river produces luxuriant crops, and is in every respect highly fruitful; but so extensive is the region from which corn is brought, that in seasons when there is a brisk demand, Dantzic is partly supplied from provinces from five to seven hundred miles inland. A large proportion of the corn-trade at this port is in our hands, therefore it is interesting to ascertain all particulars respecting the collection and mode of transit of these valuable stores.

The careless and wasteful plan on which grain is conveyed from the corn-growing districts of the Vistula to Dantzic is much to be regretted. From Cracow, where the Vistula first becomes navigable, down to the lower parts of the stream, the corn is chiefly conveyed to Dantzic in open flats. These are made on the banks in seasons of leisure, and are left to be floated when the rains of autumn, or the melted snows of the Carpathian mountains in spring, have raised the river far beyond the ordinary level. These barges

are about seventy-five feet long, twenty broad, and two feet and a half deep. They are made of fir, put together in a very rough manner, and fastened with wooden trenails; the corners being dovetailed and secured with slight iron clamps—the only iron used in their construction. A large tree the



City of Cracow.

length of the vessel runs along the bottom, to which the timbers are secured. This tree rises nine or ten inches from the floor, and hurdles are laid down upon it, extending to the sides. These hurdles are covered with matting made of rye-straw, and serve the purpose of drainage, there being a vacant space beneath to receive the water which leaks through the sides and bottom of the ill-constructed vessel. This water as it accumulates is dipped out at the ends and sides of the vessel.

The cargo usually consists of from one hundred and eighty to two hundred quarters of wheat, which is simply thrown on the mats piled up to the gunwale, and left uncovered, exposed to all the inclemencies of the weather and the pilferings of the crew, which consists of six or seven men. The barge is carried along at a slow pace by the force of the stream, and is preceded by a small boat with a man in it, who is employed sounding in order to avoid the shifting banks. The men on the barge merely use oars at the head and stern to direct the vessel in passing under bridges, or in avoiding sand-banks. Their progress in this way is very slow, so that several weeks, and even months, may be employed in the voyage. During this time, if the weather be rainy, the natural consequence is that the wheat begins to grow, and the barge speedily assumes the appearance of a floating meadow. The more rapidly this takes place the better, for the shooting of the fibres soon forms a thick mat, and prevents the rain from penetrating more than an inch or two. At the sacrifice of the whole upper surface of the wheat a covering is thus provided for the great bulk of the grain, which on the removal of its green roof, is often found in very tolerable condition.

When the cargo is deposited at Dantzic the barges are broken up, and

the men who conducted them return to their own country on foot. The grain, as it may be supposed, is not fit to be immediately placed in store-houses. It is spread out on the ground, exposed to the sun, and thoroughly dried. During rain and also at night it is piled up in the shape of a steep roof, and is covered with linen. Thus, according to the state of the weather, it may be a long or a short time in reaching the granary.

Near the lower parts of the river, where the wheat is generally of inferior quality, covered boats are employed with shifting boards, which protect the cargo from rain, but not from pilfering. The charge for bringing wheat from Cracow to Dantzic by water, is eight shillings per quarter; from Warsaw to Dantzic, five shillings. Land carriage is much dearer. From Lemberg, the principal corn-market of Galicia, wheat is brought by a tedious land route, and the cost of its conveyance to Dantzic is no less than twenty-six shillings per quarter. But all this is while steam conveyance is in its infancy. The progress of railway and steam-boat communication will, no doubt, make a great alteration in this district before many years have elapsed.

The excellent quality of much of the wheat grown in Poland causes it to be highly prized in this country. The fine heavy grain, known in London as Dantzic white wheat, is raised in a narrow district, in the province of Sandomir, Poland,—about sixty miles in length, and extending along the Vistula. Throughout the southern parts of Sandomir and Cracow, the crops are celebrated for their excellent quality: but the average growth is rarely beyond twenty bushels to the acre, the farming operations being imperfectly conducted.

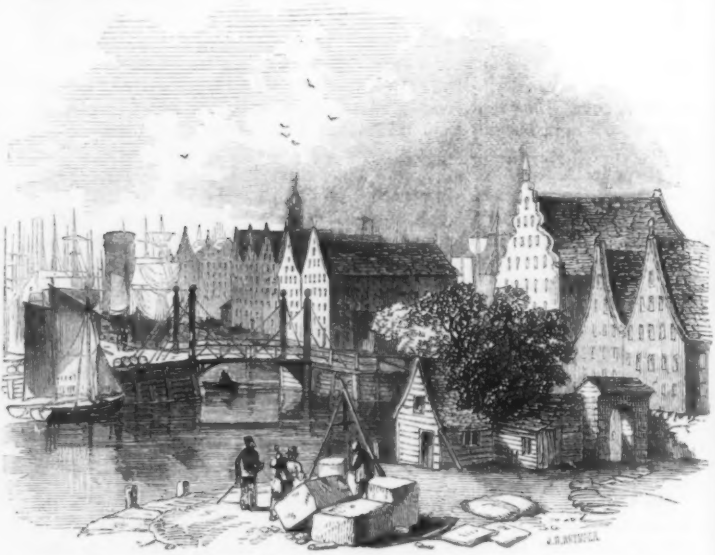
In Volhynia, one of the principal districts for supplying wheat to the markets of Dantzic and Königsberg, the population consists entirely of slaves, and either the proprietor farms his own estate, or lets it to what are called "possessors," at the rate of so much per day's labour, calculated for the peasant: thus the proprietor receives so many days' labour, or rather he receives so much money for each day's labour of the slave.

We have already seen that the grain from various districts, on arriving at Dantzic, is dried thoroughly, and afterwards stored in granaries.

These warehouses are generally seven stories high, with floors nine feet asunder. There are numerous windows for the ventilation of the corn, and sufficient spaces for turning and screening it. The whole of the corn-warehouses are capable of storing five hundred thousand quarters of wheat. Ships are loaded by gangs of porters, who will complete a cargo of five hundred quarters in three or four hours. These granaries are situated on an island formed by the Motlau, and are guarded by twenty or thirty ferocious dogs of large size, among which are blood-hounds. The dogs are let loose at 11 o'clock at night, and are kept within their districts by large high gates across the end of each of the streets leading to the main one. No light is allowed, nor any person suffered to live on this island. The dread of the dogs, it is said, is the most powerful means which could be used to keep the property secure amidst the hordes of Poles, Jews, &c., which are met with at Dantzic. No fire or robbery was ever known, and the expense to each building, with the immense property it contains, is very small. Vessels lying alongside these warehouses are not allowed to have a fire or a light of any kind on board, nor is a sailor or any other person suffered even to smoke.

These corn-stores of Dantzic, and the care taken to preserve them, are interesting and important topics at the present time; but the general

inquiry will be—at what season and to what extent are these stores available to us?



Corn Warehouses, Dantzic.

Now, we find that the Prussian and Polish landlords employ brokers at Dantzic to dispose of their wheat for delivery the following spring, and that the wording of the corn-contract generally fixes the period for the 15th of May, depending, however, on the weather for the exact fulfilment of the contract, as the breaking up of the ice, or "first open water," may take place at an earlier or later date.

The deliveries of grain, therefore, commence about the middle of May at that port, and are generally of great extent. Of course the supplies must vary greatly with the state of the adjacent countries, in some of which there may be, as at present, prohibitions against the exportation of wheat, on account of a deficient crop.

Next to Dantzic, Hamburgh is considered the greatest corn-market of Northern Europe, being the depository for large quantities of Baltic corn, as well as for the produce of the countries bordering the Elbe. The price of wheat at this port is in general much lower than at Dantzic; but this is owing to the inferiority of Holstein and Hanover wheat, which abounds in this market.

Hamburgh owes its importance, as a commercial town, entirely to its situation at the mouth of the Elbe. This fine river, in its long and winding course, intersects a vast extent of country, and affords great facilities for trade. Natural advantages are also enhanced by artificial means,—a water communication having been established by means of the Spree, and of artificial cuts and sluices between the Elbe and the Oder, and between the latter and the Vistula. Thus a considerable part of the produce of Silesia,

destined for foreign markets, and even some of that of Poland, finds its way to Hamburgh. By another canal, communication is also obtained with the river Trave, and consequently with Lubeck and the Baltic; thus saving the dangerous and difficult passage of the Sound. From the wide extent of country thus traversed, corn can be easily and safely conveyed to the general dépôt at Hamburgh, where a ready market awaits it Notwithstanding the amount of trade carried on, there are no docks or quays at this port; but vessels moor in the river outside a series of piles driven into the ground, a short distance from the shore. There is a sort of inner harbour formed by an arm of the Elbe, which runs into the city, where small craft lie and discharge their cargoes. Most of the Danish corn is consigned to Hamburgh; but this has not hitherto been of great amount.

Continuing our inquiries in the north of Europe, we find that several parts of Russia have sent us large supplies of corn. Petersburgh, the capital of Russia, has the most extensive general foreign traffic of any city in the north of Europe. The number of vessels annually entering the port varies from a thousand to sixteen hundred, of which the English are by far the most numerous. The Russians traffic with foreigners at Petersburgh, either personally or by their factors, during the winter months, and the goods are delivered in May (when the shipping season commences), or in the three succeeding months.

In the case of produce brought from northern countries, it will of course happen, that the time of its arrival here will depend more on the breaking up of ice, and on the earlier or later arrival of "the shipping season," than on any considerations relating to the harvest. In those countries, the close of harvest is not only the season for a suspension of agricultural labour, but is one in which foreign commerce must also be put a stop to; therefore it is that autumn or winter purchases of corn in northern ports are made with relation to the following spring.

The corn-trade of Petersburgh is of considerable importance, although the greater part of the wheat is of inferior quality. There are three varieties of wheat, known as *azemaia*, or soft wheat; *kubanka*, or hard wheat; and Russian, or inferior small-grained wheat. The last, which is the most abundant, is of a very dark colour, and though sound, is unfit for the manufacture of fine bread. The hard wheat is the most prized, being a large semi-transparent grain, well calculated for long keeping, either in the granary, or when made into bread; so that it is in great request for mixing with grain that is stale or out of condition. When first brought to London the millers objected to it on account of the difficulty of grinding it; but having now ascertained its excellent qualities, they are glad to purchase it for mixture with other grain.

The next port of consequence in European Russia is Riga, the largest part of whose foreign trade is transacted with England. Riga wheat is, however, inferior to that of Dantzic, and the port has now become more celebrated for flax than for corn. Two descriptions of wheat reach us from Riga; one the growth of Russia, the other of Courland: the latter is much the best. Oats are likewise largely exported from Riga.

Russia has still another port in the extreme north from which corn is exported; but the great severity of the climate must always prevent much dependence being placed on these supplies. This port is Archangel, on the right bank of the Dwina, the principal city of a province bearing the same name, part of which is exposed to the Arctic Sea. So great is the sterility of many parts of this province, that the inhabitants use the inner

bark of trees, and certain species of moss, intermixed with meal, or substituted for it, in making bread. It is, therefore, not in this province itself, but in those farther inland that corn is raised for exportation.

The chief ports of northern Europe to which our merchants have been accustomed to resort for corn, have now been briefly noticed, namely, Dantzic, Hamburgh, Petersburgh, Riga, and Archangel: we may add, that Amsterdam is also an important dépôt where the wheats of the above-named ports are to be met with, as well as almost every other variety of corn.

Let us now turn our attention to Southern Europe, and consider the fertile and beautiful country of Spain. Scarcely thirty years ago, no corn was permitted to be exported from Spain under severe penalties; but the inhabitants are now free to export as largely as they please, not only corn, but all other produce of the soil. And this they might do to an immense extent under a better state of things; but, owing to the badness of the roads, which prevent their getting a ready market for their supplies, they can scarcely be said to cultivate the land at all. Yet, such is the natural fertility of the soil, that the crops are very abundant; and in good years they so far exceed the wants of the inhabitants, that the peasantry do not take the trouble to reap the more distant fields, but merely clear such as are in the immediate neighbourhood of their respective villages. How important to these people, in every point of view, would be the ordinary facilities for commerce! What a motive for industry, and most probably what an improvement in the national character, had they the means of turning the produce of their fields to account. As it is, the habit of allowing the precious fruits of the earth to be wasted, because no immediate profit can result from securing them, must be full of mischief to the proprietors, and to the peasantry, inducing general improvidence and carelessness. Let us hope that in the course of improvement, which seems rapidly advancing in foreign countries as well as in our own, the commerce of Spain will be greatly increased, and the produce of Old Castile, Leon, Estremadura, and Andalusia (said to be the finest corn-countries in the world), will at length be turned to rich and profitable use. Latterly we have begun to import corn from Bilbao, Santander, and other ports in the north of Spain; and in 1831, we obtained 158,000 quarters from that country. The supplies brought to Bilbao are, however, principally from a distance of 130 or 140 miles: and owing to the badness of the roads, and the deficient means of conveyance, the rate of carriage advances enormously when there is a brisk demand.

The only port of Southern Europe from which any considerable quantity of grain is to be had, is Odessa, a flourishing port of Southern Russia, situated on the north-west coast of the Black Sea. All the products brought down the Dniester and the Dnieper rivers are exported from Odessa; but owing to the cataracts and shallows of those rivers, which make their navigation dangerous, a large proportion of the corn is conveyed to Odessa by land, and this by a less expensive method than might be supposed. Carts laden with corn, and drawn by oxen, are to be seen slowly wending their way towards Odessa, in parties of about one hundred and fifty together. The time chosen is that in which the peasantry are not occupied with harvest work; and as the oxen are pastured at night, no time is unnecessarily lost during the journey.

Two kinds of wheat are shipped at Odessa, hard wheat and soft; the latter is the most abundant, and is the only kind that finds its way to this

country. The hard wheat is a very fine grain, chiefly sent to Italy for making maccaroni and vermicelli.

Contrary to the practice of the northern ports, the voyage from Odessa is generally made during the winter months; but at all seasons it is a long and uncertain voyage. The reason for preferring to make it in winter is, that in summer the wheat is almost sure to heat during the vogage especially if it has not been shipped in the best order. Sometimes this heating has gone to such an extent, that the wheat has been dug from the hold of the vessel with pickaxes. The winter voyages usually commence before the end of October, for, in autumn and winter, the navigation of the Black Sea becomes dangerous. Free trade gets over all difficulties.

Looking beyond Europe, we find that exportations to a considerable amount are sometimes made from Egypt, a country greatly enriched by the annual deposits of mud from the river Nile, and bearing, with very little assistance from the husbandman, three or four crops every year. In Lower Egypt, sowing begins as soon as the waters subside, the seed being merely scattered over the land, and left to sink into the soft earth by its own weight, or trodden in by cattle driven over it for that purpose. This generally takes place in November; in February the fields are green, and in May the harvest takes place. The quantity reaped is very variable, but the pacha informed Mr. Bowring that he had exported in one year 630,000 quarters, producing on an average about sixteen shillings per quarter.

Thus in the present day, as in the time of the Pharaohs, the neighbouring nations may go down to Egypt to buy bread. Stores of corn are still laid up, and a singular method is adopted to secure them from theft. It seldom happens in Upper Egypt that there is any roof to cover the grain; nor is a covering necessary, as rain is scarcely ever known to fall; but the corn being collected into a heap, is stamped all round the foot of the heap with the impression of a large wooden seal, so that nobody can touch the pile without deranging the impression.

It might have been expected, from the fertility of the soil and the beauty of the climate, that Syria would have had an overplus of corn, and be able to export it to other lands; but so great is the want of agriculturists and labourers, that the fields lie comparatively waste. "Regions of the highest fertility remain fallow; and the traveller passes over continuous leagues of the richest soil, which is wholly unproductive to man. Nay, towns surrounded by lands capable of the most successful cultivation are compelled to import corn for the daily consumption, as is the case at Antioch, in whose immediate neighbourhood the fine lands on the borders of the Orontes might furnish food for hundreds and thousands of inhabitants."

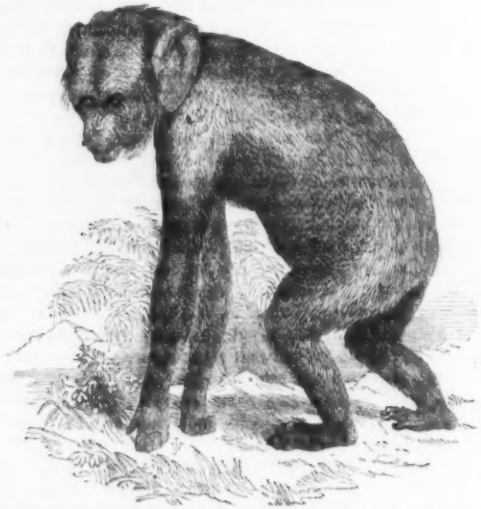
From our distant possessions in South Australia, it appears that sufficient corn is now raised, not only to supply the wants of the colonists, but to allow of exportation.

(*To be continued.*)

THE CHIMPANZEE.

The Chimpanzee inhabits Western Africa, from the River Gambia to the limits of Benguela, a tract including about twelve degrees of latitude on each side of the equator. Its height, when full-grown, seems to be at least five feet; some of the older writers say six or seven, which, from what we know of the Sumatran Orang, seems not improbable; the skin of a specimen

in the Museum of the Zoological Society measures about four feet. It is clothed with long black hair, harsh and coarse, but somewhat glossy ; thinly scattered on the breast and belly, as well as on the limbs : that on the fore-arm points upwards. The hair of the head is divided in the middle, falling down on each side, and forming large whiskers on the cheeks. The eyes are lively, deep-set, and hazel-coloured. The face, ears, and hands are naked, of a dark-brown colour, except the muzzle and palms, which are pale copper-coloured. The lips, which are large, wrinkled, and very moveable, are furnished with a thin white beard.



Many travellers in Western Africa have noticed these highly-interesting animals, ascribing to them faculties and habits which might well startle our credulity, did not modern observations on youthful specimens, which have been brought to England, render them highly probable. One of the earliest, and at the same time most sober of these accounts, is that of Andrew Battel, an Englishman, who was taken prisoner by the Portuguese in 1589, and sent by them to Angola, where he spent many years. In his narrative, published in " Purchas's Pilgrims," he says, " There are two kinds of monsters common to the woods of Angola : the largest of them is called Pongo, in their language, and the other Enjocko. The Pongo is, in all his proportions, like a man (except the legs, which have no calves) ; but he is of gigantic height. The face, hands, and ears of these animals are without hair ; their bodies are covered, but not very thickly, with hair of a dunnish colour. When they walk on the ground, it is upright, with the hands on the nape of the neck. They sleep on trees, and make a covering over their heads to shelter them from the rain. They eat no flesh, but feed on nuts and other fruits ; nor have they any understanding beyond instinct. When the people of the country travel through the woods, they make fires in the night, and in the morning ; when they are gone, the Pongos will come and sit round it till it goes out, for they do not possess sagacity

enough to lay on more wood. They go in bodies and kill many negroes, who travel in the woods. When elephants happen to come and feed where they are, they will fall on them, and so beat them with their clubbed fists and sticks, that they are forced to run away roaring. The grown Pongos are never taken alive, owing to their strength, which is so great that ten men cannot hold one of them. The young hang upon their mother's belly with their hands clasped about her. Many of them are taken by shooting the mothers with poisoned arrows." The same writer asserts, that on the death of one of these animals, the survivors cover the body with leaves and branches of trees. Purchas adds, in a note, that Battel had informed him, in private conversation, that he had known a young negro who had been carried away by the Pongos, and lived a whole year in their society. On his return he reported that they had offered him no harm, and that they were of the stature of ordinary men, but much thicker and stouter.

The latest notice of the habits of the Chimpanzee in a state of nature is by Lieut. Sayers, who obtained possession of a young one in 1838, which he brought to England. He concludes that it ascends trees only for food or for observation; from the negroes he learned that "they do not reach their full growth till between nine and ten years of age; which, if true, brings them extremely near to the human species; as the boy or girl of West Africa, at thirteen or fourteen years old, is quite as much a man or woman as at the age of nineteen or twenty in our more northern climate. Their height, when full grown, is said to be between four and five feet: indeed, I was credibly informed that a male Chimpanzee, which had been shot in the neighbourhood, and brought into Freetown, measured four feet five inches in length; and was so heavy as to form a very fair load for two men, who carried him on a pole between them. The natives say that, in the wild state, their strength is enormous; and that they have seen them snap boughs off the trees with the greatest apparent ease, which the united strength of two men could scarcely bend. The Chimpanzee is, without doubt, to be found in all the countries from the banks of the Gambia in the north, to the kingdom of Congo in the south; as the natives of the intermediate parts seem to be perfectly acquainted with them. From my own experience I can state that the low shores of the Bullom country, situated on the northern border of the River Sierra Leone, are infested by them in numbers quite equal to those of the commonest species of Monkey. I consider these animals to be gregarious; for when visiting the rice-farms of the Chief Dalla Mohammadoo, on the Bullom shore, their cries plainly indicated the vicinity of a troop, as the noise heard could not have been produced by less than eight or ten of them. The natives also affirmed that they always travel in strong bodies, armed with sticks, which they use with much dexterity. They are exceedingly watchful; and the first one who discovers the approach of a stranger, utters a protracted cry, much resembling that of a human being in the greatest distress. The first time I heard it I was much startled; the animal was, apparently, not more than thirty paces distant; but had it been but five, I could not have seen it, from the tangled nature of the jungle; and I certainly conceived that such sounds could have only proceeded from a human being, who hoped to gain assistance by his cries, from some terrible and instant death. The native who was with me laid his hand upon my shoulder, and pointing suspiciously to the bush, said, 'Massa, Baboo live there!' and in a few minutes the wood appeared alive with them; their cries resembling the barking of dogs. My guide informed me that the cry first heard was to inform the troop of

my approach, and that they would all immediately leave the trees, or any exalted situation that might expose them to view, and seek the bush; he also showed evident fear, and entreated me not to proceed any further in that direction. The plantations of bananas, papaws, and plantains, which the natives usually intermix with their rice, constituting the favourite food of the Chimpanzees, account for their being so frequent in the neighbourhood of rice fields. The difficulty of procuring live specimens of this genus arises, principally, I should say, from the superstitions of the natives concerning them, who believe they possess the power of 'witching.'"*

Several specimens of this interesting animal in its infancy, have at various times been brought to Europe, and the observations made on their manners in captivity have uniformly shown it to possess a very high degree of intelligence of a peculiar character, great docility, and an affectionateness mixed with playfulness, far removed indeed from the character of the common Monkeys. The most interesting of all these individuals was a male, which lived in the menagerie of the Zoological Society about a year. For a considerable period after its arrival in September 1835, it continued in the best health and spirits, and having survived a winter in our cold and moist climate, hope was entertained that it might be reared to maturity. It died, however, in the following autumn. Several very pleasing accounts have been published of the manners of "Tommy," from which we select the following:—

"On entering the room in which the Chimpanzee was kept," observes Mr. Martin, "the first thing that struck the attention of visitors was its aged appearance, and its resemblance to an old, bent, diminutive Negro.

Portrait of "Tommy."

"This appearance of age was much increased by a spare beard of short, white hairs, which was spread over the muzzle, and by the deep wrinkles which furrowed the cheeks. It was not until being informed of its age, which, as it proved by its dentition, was in all probability about two years and a half, that a person, ignorant of the natural history of the Chimpanzee, would have considered this specimen in the light of an infant; its actions, however, were those of a child, capable of running about and amusing itself; lively and playful, yet neither mischievous nor petulant; it was alive to everything which took place about it, and examined every object within reach, with an air so considerate and thoughtful, as to create a smile on the face of the gravest spectator."†

Another zoologist thus describes its manners in detail:—

* Proc. Zool. Soc. 1839. † Quadrupeds, p. 382.

"In the Zoological Gardens he occupied a room in the keeper's apartments, in which a large cage was constructed for his accommodation, and which was kept as nearly as possible in a uniform temperature. Two artificial trees had been erected in the cage, and a rope suspended between them, to afford him an opportunity of amusing himself by climbing or swinging; but unless when commanded by his keeper, to whom he invariably showed a ready and willing obedience, he generally preferred running about the bottom of the cage, or amusing himelf with the visitors. When moving quickly his pace was a kind of brisk canter, and unless when his hands were employed in carrying anything, he invariably walked on all-fours, leaning on the knuckles of the half-closed fist, as observed by Tyson and Dr. Traill. At the same time, the entire sole of the hind-foot was brought into contact with the ground in the act of progression, and as the arms were not very much longer than the legs, the body was stooped or bent at the shoulders, though the attitude, nevertheless, partook more of the erect than the horizontal. . . . . .

"But though, when perfectly free and unrestrained, his most usual mode of progression was on all-fours, Tommy could, nevertheless, adopt the biped pace and station with great ease, when occasion required it. His feet, and particularly his heels, were broader and better adapted for this purpose than those of the Ourang-outan, and in walking upright he was not under the same necessity of stretching out his arms, or moving them to and fro, for the purpose of securing his tottering equilibrium: the soles of his feet, however, were flat, and this circumstance, united to the greater distance and freer movements of his hind-legs, gave his gait a waddling motion, similar to that of human beings whose feet are affected with the same deformity. In many of his other actions, Tommy likewise approximated nearly to the human species. He was, without exception, the only animal we have ever seen that could leap, or jump upon his hind-feet, like man; and this feat he often performed, both on the floor of his cage, and in descending from his tree, or from the bars of his cage, up which he often climbed for the purpose of seeing over the heads of the spectators. He frequently indulged, too, in a kind of rude stamping dance, perfectly similar to that of a child three or four years old, only that it was executed with greater force and confidence. All this arose from the uninterrupted spirits and buoyancy natural to the infant mind; he was at all times cheerful, lively, and perpetually in motion, from sunrise to sunset, either jumping, dancing, or cantering about his cage, romping and playing with the spectators, or amusing himself by looking out at the window.

"He did not often climb up his tree, unless at the command of his keeper; he appeared, indeed, to be upon the whole but an indifferent climber, particularly when compared with the Ourang-outan, and generally preferred the level surface of the ground; whether it was that his tree was not properly constructed, or that he was too heavy and corpulent: but from his manifest awkwardness in performing this action, and his evident preference of the level surface, it is highly probable, as, indeed, most travellers have affirmed, that the progression and habits of the species are more terrestrial than arboreal, and that they ascend trees, principally, if not solely, in search of food. When ordered to seat himself in his swing, Tommy did so with great good humour, stretching out his foot to some of the company to set him in motion. We observed that he used the right hand in preference to the left, and had obviously greater power and facility of action with this than the opposite member. In the human subject this has generally been

attributed to the effects of education; but in Tommy, at least, it was a natural action, since he was perfectly unsophisticated in this respect; and it would be a highly-interesting inquiry to ascertain whether the same preference may not be exhibited in other apes, and consequently how far it may depend upon some necessary and inherent principle of the animal conformation, rather than upon mere education. . . . . .

"All his actions were those of a human infant; and though his powers, both mental and physical, were, comparatively speaking, more developed, he had all the gaiety, playfulness, and curiosity of the child, the same innocence, the same gentleness, the same affection, and the same restless, pettish, and inconstant disposition; even his natural appetites and tastes were similar; he had the same natural fondness for sweets, the same propensity to eat at all times and of all substances, and equally preferred milk and tea to spirituous and fermented liquors.

"In natural shrewdness and sagacity, however, Tommy greatly excelled the human infant, and, indeed, for that matter, many grown individuals. . . . . It is more particularly in interpreting your wishes and intentions from your looks, tones, and gestures, that this animal exhibited the most wonderful quickness of apprehension, vastly superior, indeed, to that of ordinary man, and only equalled by what we observe in deaf and dumb people, whose defect of speech is compensated by this unusual acuteness of observation. We have seen Tommy, on one occasion, when commanded by his keeper to bring him the core of an apple which he had thrown down on the floor of his cage, manifest the greatest anxiety to obey, though much perplexed to discover what it was he was required to do, as he evidently did not comprehend the nature of the order. He moved towards the window, stopped and looked back at the keeper, and then at the company; perceiving by their looks that he was mistaken, he returned, put his hand upon his swing as if to mount, again looked round to see if he was right, and was manifestly much puzzled what to do; at length one of the spectators pointed to the core of the apple; he stretched his hand towards it, looked inquiringly at the keeper, hesitated for a moment till he received the expected nod of approbation, and then lifted and carried it to his attendant without farther hesitation."*

NINEVEH—THE PALACE.

The general form, arrangement, and purposes of the apartments, in which the monuments of ancient Assyria have been discovered, were at first involved in so much obscurity, as to be unintelligible. The labours, however, of Mr. Fergusson seem to have thrown light on what was before so obscure. From his restorations, which, though in some points only conjectural, are supported by arguments of great weight, we are able to form a somewhat distinct idea of an Assyrian palace, and of the public and private life of the monarch who reigned in it. We can do little more, in these pages, than convey an outline of the results arrived at by Mr. Fergusson, referring our readers to his valuable work itself for the reasonings by which they are attained.

The great collection of buildings which constituted the royal dwelling-place was built on a flat platform of masonry, eight, ten, or even twenty yards in height above the surrounding plain. This platform or terrace was, in Assyria, owing to the deficiency of stone, built of sun-dried bricks,

* Lib. Ent. Kn. "Menageries," vol. i. p. 65.

faced with broad slabs of alabaster; in Persia, however, it was constructed of stone or marble. Its surface was not of equal elevation in all parts, but terraces of different levels sometimes were formed on the great superficies. Access to the platform from below was obtained by one or more flights of steps, which led up from the plain, not by a direct advance, but laterally; sometimes by one, sometimes by two series of two flights each, the first flight receding from, the second approaching, a central point.

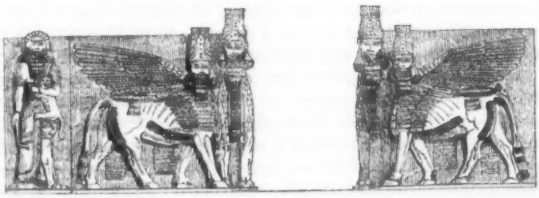
The object of this arrangement was twofold, and is easily understood on inspecting the ruins. The first was to admit of the front being adorned with sculpture; the second depended on the circumstance that immediately before the summit of the steps, upon the platform, was placed the throne-room, or hall of audience, in which the sovereign sat on state occasions.

The propyleum, or throne-room, was an isolated building of comparatively small size, containing a single apartment supported by four pillars. The front, and each of the two sides, were pierced with central doorways of massive grandeur, each guarded by a pair of those colossal cherubic forms which we have before described. In an inscription many times repeated on the piers of this edifice in front of the Hall of Xerxes at Persepolis, the hall is called "duwarthim," which, as Colonel Rawlinson suggests, certainly means *door* or *gate*, and is found in nearly the same form in all the cognate languages. "Still," says Mr. Fergusson, "it is not a gateway or entrance in the manner we usually understand this word, but used more as a justice-hall or place of assembly at the entrance or gate of the palace. I have, for instance, no hesitation in identifying this building with the gate which plays so important a part in the story of Esther, under the reign of the very king who built this one,—the gate in which Mordecai sat when he overheard the conspirators, and in which Haman sat when he refused to bow to him, and where Mordecai could not enter when clothed in sackcloth.

Perhaps this will appear yet more clear by a reference to the following passage, in which "to sit in the gate of the king" expresses the highest office of a subject in the court of Babylon.

"Then Daniel requested of the king, and he set Shadrach, Meshach, and Abednego, over the affairs of the province of Babylon; but Daniel sat in the gate of the king." (Dan. ii. 49.)

It is supposed that the throne of judgment was placed against that wall which had no door; that the front entrance, which faced the throne, was reserved for the king or vizier, who sat in state, while the crowd, who came to demand justice or to pay their homage, passed before the centre of the hall before the judgment seat, entering at one lateral doorway and going out at the opposite; and thus these became the principal portals, distinguished by the superior grandeur of their gigantic guardians, or by some other architectural peculiarities.



GATEWAY.

The walls on each side of the grand gateways were adorned with magnificent sculptures. At Khorsabad the propyleum that stood almost on the edge of the terrace, looking down upon the city below, M. Botta describes as having portals formed by two winged human-headed bulls of nineteen feet in height, crowned with three-horned mitres, and looking outwards. The wall on each side of the portal consisted of great slabs, on which were sculptured in bold relief two similar cherubic forms, rather less gigantic, standing back to back, between which stood a colossal human figure, strangling a lion in his arms.

Beyond the throne-room or "gate," other flights of stairs appear to have conducted the visitor to a higher level, on which the various erections which constituted the true palace were placed. These consisted of suites of apartments, appropriated to distinct purposes, surrounding quadrangular courts. Thus, if we take for an example the palace at Khorsabad, according to Mr. Fergusson's restoration, the eastern angle of the upper platform was occupied by a large quadrangular space, which he calls the Outer Court, about 350 feet long by 200 feet wide. Passing directly across this court, through its length, the visitor came to the palace wall, in which was a narrow gallery or passage, closed by a massive door; the door has disappeared, but the places for its hinges yet remain, and there is a recess in the passage wall to receive its ponderous lock, when it stood open, as it is supposed was usually the case; for the part of the wall behind the door was not sculptured. The portals of the gate were formed, as usual, of two winged human-headed bulls, and the outer surface of the wall on each side was adorned with human figures. The sides of the passage were covered with a double row of strangers bringing tribute to Assyria, with scribes and attendants, accompanied by long inscriptions, recording the successful campaigns of king Shalmaneser, which are repeated at greater length on the walls of the apartment to which this passage is the entrance. The gallery was paved with large slabs of stone, and, as Mr. Fergusson believes, was covered with an arched roof.

Having passed through this covered passage, which was ten feet in width, and fifty in length, reckoned from the door, but eighty-five reckoned from the faces of the guardian bulls at each end—the stranger found himself in another quadrangle, the Palace Court, bounded on the north-east and north-west by the parapet-wall of the platform, which looked down on the plain without the city walls; and on the two opposite sides by the magnificently adorned walls of the palace itself, or the state-apartments of the king. He could not fail to be struck with the splendour of the scene presented here. The various doorways leading to the apartments were guarded as usual by the awful cherubic bulls facing outwards towards the court, while the pylons or great abutments, projecting between the doors, were sculptured with similar forms placed back to back, with their faces turned outwards, or with colossal figures of priests, human and vulture-headed, ministering before the sacred tree, or performing other mystic ceremonies. Above the range of slabs of alabaster sculptured in bas-relief, which extended to the height of ten feet from the floor, the walls were faced with kiln-burnt tiles painted or enamelled in elegant patterns.

Above the height to which these painted tiles extended, which was three or four feet at least above the slabs, we have no certain knowledge of the structure or appearance of the edifice. On Mr. Fergusson's theory, the walls which formed the apartments, constructed of sun-dried bricks and of amazing thickness, were carried up to about twice the height of the slabs,

XUM

or twenty feet. "Above this the top of the wall [which was ten, fifteen, or even twenty feet thick] must either have been paved with kiln-burnt bricks or tiles, or, what is more probable, floored with wood, so as to protect the mud bricks [of which the solid wall was constructed] from the action of the weather. . . . On this platform two rows of dwarf pillars stood, one on the inner, one on the outer edge of the wall, rising to a height of twelve or fifteen feet, more or less. These pillars supported a flat terrace-roof over each wall, composed of mud, and plastered on the upper surface [and carried continuously over all the apartments]; but as no horizontal timber could carry such a roof over a space of thirty-three feet [the width of the principal room], I conceive that all the larger halls had two rows of pillars down their centres, and the smaller ones probably one row; the very narrow ones were almost certainly without pillars at all. The central hall, I conceive, must have had a roof higher than the rest, and trussed to a certain extent, so as to admit into it a sufficiency of light, which it could not receive through the rooms on either side of it."*

The idea of such a structure will perhaps be rendered more clear if the reader will suppose himself on the paved summit of the broad wall. The pillars support a flat roof, but the sides are quite open to the light and air; approaching one side, and leaning over a low parapet, he looks down into the apartment beneath, from which one or two rows of columns rise to the roof, which is continuous with, and of the same level as, that which shelters the corridor on which he stands. Across the apartment his eye rests on a similar corridor on the opposite side, which he may reach if he chooses, by walking half-way round, along the bounding parapet. Turning from this view, he crosses the corridor to its outer side, whence his eye looks down without interruption on the court beneath, or, if the wall be an external one, on the edge of the platform at the foot of the palace, and on to the plain beyond, with the broad Tigris winding like a band of silver through its verdant meadows.

A passage in a modern Persian work, the "Dabistan," quoted from an ancient one no longer extant, throws light on the structure, and on the curious customs probably connected with it. After alluding to the worship of the seven planets under distinct symbols or images, in a city, which Mr. Fergusson supposes to be certainly Persepolis, the ancient writer says,—"On each day in the week, in the dress appropriated to each planet, the king exhibited himself from a lofty *tabsar*, or window, fronting the temple of the planet, whilst the people in due order and arrangement offered up their prayers. For example, on Sunday, or Yakshambah, he showed himself clad in a yellow kaba, or tunic of gold tissue, wearing a crown of the same metal set with rubies and diamonds, covered with many ornaments of gold, —from the tabsar, the circumference of which was embossed with similar stones. Under this window the several ranks of military were drawn out in due gradation, until the last line took post in the kashudzar, or ample area, in which were posted soldiers of the lowest order. When the king issued forth like the sun from the orient of the tabsar, all the people prostrated themselves in adoration, and the monarch devoted himself to the concerns of mankind. The tabsar is a place of observation in a lofty pavilion, which the princes of Hindostan call Jahrokah, or lattice window. On the other days the king appeared with similar brilliancy from the other tabsars. In like manner, on the great festivals, the king went in choice garments to the temples of the several images, and on his return seated

* Palaces of Nineveh, &c., p. 271.

himself in the tabsar facing the image of the planet, or having gone to the Rozistan, or Dadistan, devoted himself to the affair of state. The Rozistan was a place which had no tabsar, where the king seated himself on the throne, his ministers standing around in due gradation.

"The Dadistan was the hall of justice, where, when the king was seated no one was prevented from having access to him; so that the king first came to the tabsar, then to the Rozistan, and lastly to the Dadistan."

The curious passage above quoted from the "Dabistan," happily illustrates, as we venture to think, one or two allusions in the Song of Solomon.

"My beloved is like a roe or a young hart: behold, he standeth behind our wall, he looketh forth at the windows; showing himself through the lattice." (Cant. ii. 9.)

"Thine head upon thee is like Carmel, and the hair of thine head like purple; the king is held [*marg.* bound] in the galleries." (Cant. vii. 5.)

In the former of these the admiration of the speaker is excited by the magnificence and elegance of her royal spouse, standing behind the low parapet of the tabsar, and displaying himself (*marg.* flourishing) through the Jahrokah, or lattice window. In the second, we may suppose the king to be in the tabsar of the hareem apartments, arrested, and, as it were, spell-bound, by the beauty of his bride, of whom he has caught sight as he looks down. Perhaps, indeed, from the expression, "*our* wall," in the former passage, the allusion there also is to the tabsar of the hareem, or its court, rather than that which looked abroad upon the world; for though the seclusion of females among the Jews was not so absolute as among the more oriental nations, the bride of Solomon would scarcely have an opportunity of gazing on him when he showed himself to the thronging populace.

DIVISION OF LABOUR.

Observe the accommodation of the most common artificer or day-labourer, in a civilized and thriving country, and you will perceive that the number of people, of whose industry a part, though but a small part, has been employed in procuring him this accommodation, exceeds all computation. The woollen coat, for example, which covers the day-labourer, coarse and rough as it may appear, is the produce of the joint labour of a great multitude of workmen. The shepherd, the sorter of the wool, the wool-comber or carder, the dyer, the spinner, the weaver, the fuller, the dresser, with many others, must all join their different arts, in order to complete even this homely production. How many merchants and carriers, besides, must have been employed in transporting the materials from some of those workmen to others, who often live in a very distant part of the country! How much commerce and navigation in particular; how many ship-builders, sailors, sail-makers, rope-makers, must have been employed, in order to bring together the different drugs made use of by the dyer, which often come from the remotest corners of the world! What a variety of labour, too, is necessary, in order to produce the tools of the meanest of those workmen! To say nothing of such complicated machines as the ship of the sailor, the mill of the fuller, or even the loom of the weaver, let us consider only what a variety of labour is requisite in order to form that very simple machine, the shears, with which the shepherd clips the wool. The miner, the builder of the furnace for smelting the ore, the feller of the timber, the burner of the charcoal to be made use of in the smelting house, the brick-maker, the layer, the workmen who attend the furnace, the mill-

wright, the forger, the smith, must, all of them, join their different arts in order to produce one pair of shears. Were we to examine, in the same manner, all the different parts of his dress and household furniture, the coarse linen shirt which he wears next his skin, the shoes which cover his feet, the bed which he lies on, and all the different parts which compose it, the kitchen-grate at which he prepares his victuals, the coals which he makes use of for that purpose, dug from the bowels of the earth, and brought to him, perhaps by a long sea and a long land carriage, all the other utensils of his kitchen, all the furniture of his table, the knives and forks, the earthen or pewter plates upon which he serves up and divides his victuals, the different hands employed in preparing his bread and his beer, the glass window which lets in the heat and the light, and keeps out the wind and the rain, with all the knowledge and art requisite for preparing that beautiful and happy invention, without which these northern parts of the world could scarce have afforded a very comfortable habitation, together with the tools of all the different workmen employed in producing these different conveniences: if we examine, I say, all these things, and consider what a variety of labour is employed about each of them, we shall be sensible, that without the assistance and co-operation of many thousands, the very meanest person in a civilized country could not be provided even according to what we very falsely imagine the easy and simple manner in which he is commonly accommodated. Compared, indeed, with the more extravagant luxury of the great, his accommodation must, no doubt, appear extremely simple and easy: and yet it may be true, perhaps, that the accommodation of a European prince does not always so much exceed that of an industrious and frugal peasant, as the accommodation of the latter exceeds that of many an African king, the absolute masters of the lives and liberties of ten thousand naked savages.

All these advantages arise from the division of labour. For if each man were to make his own clothes, and build his own house, and construct his own tools and household utensils, he would not be able to do any one of these things so well as if he had devoted his whole time and attention to one of them. Each trade requires more study and practice than he would be able to bestow upon it: so he would probably be clumsy and awkward at all.—SMITH.

But there is another benefit of the division of labour, apart from the superior skill acquired by each man's pursuing one trade. It is this. In a great variety of cases, nearly the same time and labour are required to perform the same operation on a larger or on a smaller scale—to produce many things, or one, of the same kind.

For instance, suppose a number of travellers proceeding through some nearly desert country, such as many parts of America, and journeying together in a large party for the sake of mutual security: when they came to a resting-place for the night, they would be likely to agree among themselves, that some should unlade and fodder the cattle, while others should fetch firewood from the nearest thicket, and others water from the spring; some in the meantime would be occupied in pitching the tents, or erecting sheds of boughs; others in preparing food for the whole party; while some again, with their arms in readiness, would be posted as sentinels in suitable spots, to watch that the rest might not be surprised by bands of robbers. Now, but for such an arrangement, each man would have to go both to the spring for water, and to the wood for fuel—would have to prepare his own meal with almost as much trouble as it costs to dress food for the whole—

and would have to encumber himself with arms while performing all these tasks, lest he should be suddenly attacked by an enemy.

There is, perhaps, no one instance that displays this particular benefit of the division of labour more than the establishment of the post-office for the conveyance of letters. It makes very little difference of trouble, and none of time, to the postman, whether he carries one letter, or a whole parcel of letters, from one town to another; and yet, but for this contrivance, each person would have to send a messenger on purpose whenever he wanted to write to a friend at a distance.

MOUNTAIN PASSES.

The vast barrier formed by an extensive chain of mountains would shut out the countries on either side from all communication with each other, were it not for certain gaps, or breaks in the line, whereby a passage is obtained over this colossal wall. Such openings are called *Passes*, and are so frequent, that in the Swiss portion of the Alpine chain alone there are not less than fifty.

In travelling up these passes, the gradual change in climate, scenery, and produce, which takes place in a day's journey, is very interesting. At

first the slopes are covered with corn, ripe, perhaps, for the harvest, and the warmth is that of midsummer; further on the crops are green, and scarcely yet in ear; a little higher up the pass, the corn gives place to the dark and gloomy pine-forest. Beyond the forest, the vegetation becomes extremely scanty, though even on the edge of the glacier, bright flowers peep out during the short summer. But as the top of the pass is gained, vegetation disappears, or is only seen in the dry lichen on the rock. The air becomes intensely cold, and the whole scene is one of wintry desolation.

The above engraving represents a remarkable pass across the Swiss Alps, called the *Gemmi*. The summit of this pass is more than seven thousand feet above the level of the sea; and exhibits the wildest and most dreary aspect, being formed of naked rocks, on which not even a lichen is to be seen. From a point very near the summit of the pass, a magnificent mountain view is obtained; Monte Rosa, the second mountain in Switzerland, and the chain of mountains which separate the Canton of the Valais from Piedmont, being immediately in front of the spectator. As the traveller (supposed to be coming from the Canton of Berne) descends into the valley, his path is along the narrow ledge of a precipice of fearful depth, where the rock is all but vertical. Here is formed one of the most extraordinary of the Alpine paths, said to be constructed by the Tyrolese. It is a shelf or groove, cut in the face of the wall of rock, and varying from three to five feet in width. It descends in a zig-zag manner down the rock, and is scarcely broad enough to allow a mule to pass. The road

is protected by a low wall, but it is, nevertheless, a fearful thing to travel along so narrow a shelf, with a wide abyss yawning before you. Over this pass, and along this remarkable road, invalids are constantly carried to the hot springs at Leuk, a small hamlet situated on an elevation greater than that of the highest mountains of Great Britain. Sick and infirm persons are carried on men's shoulders in a sort of litter, and sometimes have their eyes bandaged, that the terrors of the situation may not shock their nerves.

The sublime scenery of mountains is seldom visited in winter by persons capable of describing it. A French writer, however, who travelled at that season in the Pyrenees, has given a few powerful sketches. He

describes the snow-storms as being exceedingly violent, and the force of the wind in many of the depths tremendous. There is a proverb among the mountaineers, that in these passes "the son never waits for the father, nor the father for the son;" meaning that the strong instinct of self-preservation absorbs every other feeling in those moments of danger. The following passage will convey some idea of the nature of the scenery:—"At Mont Louis the mountains draw closer together, and increase in height; you enter a narrow passage, which is frightful from the dimensions of its forms, and the irregularity which distinguishes it. The road is cut out on the side of the rocks at one-third of their height, and allows room for one mule at most. Above are inaccessible heights, below are torrents, and beyond are other mountains connected with those round which you are riding. The scene is most diversified. Sometimes you rise and seem to command the abyss, at others you descend and seem to have it over your head. Sometimes, following the windings of the defile, you come into an obscure enclosure, apparently without an outlet, then suddenly doubling a point, you discover an unexpected and immense prospect; vast amphitheatres of dazzling snow, black pines, and a succession of mountains, which crowd together and lock into each other. The confusion of cubic and broken masses of limestone, blocks of granite, the schistus detached in slabs or broken into little flakes, added to the loud roaring of the rapid torrents, the disorder of the winds and of the compressed and rent clouds, afforded a complete picture of chaos."

The Port of Puymaurin, one of the most dangerous of the ordinary passes, was traversed by the same writer in stormy weather. On approaching the mountain on the side of which the port is situated, a walk of two hours through a powerful wind, accompanied by a dry cutting snow, was only preparatory to the more severe weather to be encountered in the pass. At a place called Portez, he stopped for refreshment, and was so completely benumbed that he did not for a long time recover his sense of feeling. Again on the road, his sufferings were less than in the morning, from being already accustomed to the cold wind, and the hour being that of noon. As he proceeded he noticed pauses in the wind when there was no other motion than the silent fall of the snow. "These," he says "were the intervals of which I took advantage to look about me; but they were soon interrupted; the wind suddenly burst forth with unexpected fury, rolled the clouds, and drove them into the recesses; then carrying away the snow which was fast falling, and that which already lay upon the ground, it raised it like the waves of the sea, or drove it forward like the foam upon the waters. The dreariness of these moments it is impossible to describe. The changes of forms, the entirely new position of the snow, the unexpected arrangement of the clouds, the frightful noises, were most remarkable. During one of these moments I was surprised by a wonderful scene. On reaching the interior summit of the port, I turned round and beheld before me an immense succession of valleys displayed one behind the other. The clouds extended to the farthest line of this horizon; but all at once, while those which were over my head were dark and thick, those in the background became light, and I perceived at a great distance the country from which I had come perfectly illumined by the sun, and apparently enjoying the most perfect calm."

Such are some of the wild and terrific features of mountain scenery, among which the traveller, humbled by a sense of danger, and awed by the majesty of nature, can scarcely fail to recognise the wonder-working power of the Divine Hand.

COMMON BORAGE (*Borago officinalis*).

This bright azure blossom rears itself from the heap of rubbish on the waste places of our land, but is not a very common plant there. It is far more often one of the ornaments of the cottage garden; and rightly is it planted, for it is one of the flowers in which bees especially delight, and they are said to derive more nourishment from it than from any flower which blows. The brilliant blue petals, with their prominent stamens, open to the sun in June and July. The whole plant is covered with rough stiff hairs, and the young buds are enclosed in cups of a reddish tinge. The Borage has rather an unpleasant odour. The French call it *Borrago*, and both their name and ours are corruptions of the old word *Corago*, which was taken from *cor*, the heart, because of its cordial qualities. In days when old proverbs were in daily use, one of the common adages recorded the supposed virtues of this plant—"I Borage bring courage;" and the old naturalists, from Pliny downwards, affirm very confidently, that it is efficacious in dispelling sadness. Thus Burton says:—

> "Borage and Hellebore fill two scenes,
> Sovereign plants to purge the veins
> Of melancholy, and clear the heart
> Of those black fumes which make it smart."

The young leaves were either boiled, or used as salads, for this purpose, though their flavour is anything but agreeable; and the flowers steeped in

wine were found to be very invigorating. The tissues of the plant contain gum, and it may therefore be used as a demulcent. It also possesses nitrate of potash, and, when burnt, will emit sparks with a slight explosive sound. It is thought to be a native of Aleppo, but it has become naturalized now in most European countries. The garden species are very easy of culture, and we have one kind from Persia, another from Numidia, and a third from Corsica. The Persian species has pink flowers, but the others have brilliant blue blossoms. Borage still forms an ingredient in the drink called "cool tankard."

INDUSTRY.

THE world, in which we have a being, and all things around us, remind us of the continued necessity of labour: for though the earth, by the blessing of the Almighty, produces food sufficient for man, and the various animals that inhabit it; yet, without labour, it would soon become a wilderness, covered with weeds, briars, and thorns.

Besides food and clothing, our nature requires that we should also provide shelter against the inclemency of the weather; these are continual calls upon us for self-exertion, which contribute as much to our happiness as to our health.

Moderate labour promotes the free circulation of the blood, and carries off disorders, which indolence would occasion; the labouring man eats his bread with an appetite to which the idle and voluptuous are strangers; his sleep is sweet, and his rest undisturbed; he is unacquainted with care, and his life is tranquil, if governed by a due sense of religion.

Industry is rewarded in many ways: "The hand of the diligent maketh rich. He that gathereth in summer is wise; but he that sleepeth in harvest causeth shame." (Prov. x. 4.)

"He that would thrive, should rise by five;" and, as Poor Richard observes, "Himself should hold the plough or drive."

"The difference between rising at five and seven in the course of forty years, supposing a man to go to bed at the same time he otherwise would, amounts to twenty-nine thousand hours, or three years, one hundred and twenty-one days, and sixteen hours, which will afford eight hours a day for exactly ten years: so that it is the same as if ten years were added to our lives, in which we could command eight hours a day for our improvement in useful things."

But, besides lengthening, industry sweetens life; the habitation of the industrious man is comfortable and clean, and his careful wife is truly his counterpart—she is the same in her family as he is in his business, always employed, mending and making the most of their garments.

When any good work becomes habitual, it goes on easily and agreeably; for we are, by nature, so much the creatures of habit, that we had need to look well that our habits are good ones.

Difficulties in this life, however, must be expected, and they are even necessary to quicken us to exertion. A persevering principle of self-support is honourable to a man, however humble his situation in life may be; it raises him to a state of respectability in society, and cannot fail to be crowned with its deserved reward.

A determined resolution is half way towards the accomplishment of our object.